

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application. An identifier indicating the status of each claim is provided.

Listing of Claims

1-4. (Canceled)

5. (Currently Amended) A robot apparatus including a body and a plurality of movable parts connected to said body, comprising:

a plurality of movable part driving means for driving said movable parts;

a local control loop for controlling one of said movable parts;

local control means for controlling said local control loop;

an integrated control loop serving as a higher order control loop than said local control loop for controlling said local control loop;

integrated control means for controlling said integrated control loop; and

priority determination means for determining priority between control amounts calculated by said local control means and said integrated control means to be used to control said movable parts based on a predetermined condition, A robot apparatus according to claim 1,

wherein said local control means issues a notification of states of the movable part driving means of said local control loop to said integrated control means, and said integrated control means issues control instructions including target values successively corrected based on the states of the movable part driving means included in the notifications.

6. (Currently Amended) A robot apparatus including a body and a plurality of movable parts connected to said body, comprising:

a plurality of movable part driving means for driving said movable parts;

a local control loop for controlling one of said movable parts;

local control means for controlling said local control loop;

an integrated control loop serving as a higher order control loop than said local control loop for controlling said local control loop;

integrated control means for controlling said integrated control loop;

priority determination means for determining priority between control amounts calculated by said local control means and said integrated control means to be used to control said movable parts based on a predetermined condition; and ~~A robot apparatus according to claim 1, further comprising~~

component ratio adjustment means for adjusting component ratios between the control amounts for said movable part driving means from said integrated control means and the control amounts for said movable part driving means from said local control means.

7. (Previously Presented) A robot apparatus according to claim 6, wherein said component ratio adjustment means adjusts the component ratios in response to the strength of force acting upon said robot apparatus or some other state of said robot apparatus.

8. (Previously Presented) A robot apparatus according to claim 6, wherein said component ratio adjustment means transiently adjusts the component ratios for the changeover from control by said local control means to control by said integrated control means in a predetermined set period of time.

9. (Previously Presented) A robot apparatus according to claim 8, wherein the set time is determined in response to an object apparatus motion by said integrated control means.

10. (Previously Presented) A robot apparatus according to claim 8, wherein said robot apparatus is a legged mobile robot including a plurality of movable legs, and the set time is determined depending upon a walking cycle using said movable legs.

11-19. (Canceled)

20. (Currently Amended) A motion controlling method for a robot apparatus including a body and a plurality of movable parts connected to said body, comprising:

a local control step of controlling a motion of said robot apparatus by means of a local control loop which control some of said movable parts;

an integrated control step of controlling a motion of said robot apparatus by means of a integrated control loop which serves as a higher order control loop than said local control loop and controls said local control loop; and

a priority determination step of determining priority between control amounts calculated by the local control step and the integrated control step to be used to control said movable parts based on a predetermined condition, ~~A motion controlling method for a robot apparatus according to claim 16,~~

wherein the local control step issues a notification of operation states of the movable part driving means at the local control step to the integrated control step, and the integrated control step issues control instructions including target values successively corrected based on the states of the movable part driving means included in the notifications.

21. (Currently Amended) A motion controlling method for a robot apparatus including a body and a plurality of movable parts connected to said body, comprising:

a local control step of controlling a motion of said robot apparatus by means of a local control loop which control some of said movable parts;

an integrated control step of controlling a motion of said robot apparatus by means of a integrated control loop which serves as a higher order control loop than said local control loop and controls said local control loop;

a priority determination step of determining priority between control amounts calculated by the local control step and the integrated control step to be used to control said movable parts based on a predetermined condition; and ~~A motion controlling method for a robot apparatus according to claim 16, further comprising~~

a component ratio adjustment step for adjusting component ratios between the control amounts by the integrated control step and the control amounts by the local control step.

22. (Previously Presented) A motion controlling method for a robot apparatus according to claim 21, wherein the component ratio adjustment step adjusts the component ratios in response to the strength of force acting upon said robot apparatus or some other state of said robot apparatus.

23. (Previously Presented) A motion controlling method for a robot apparatus according to claim 21, wherein the component ratio adjustment step transiently adjusts the component ratios for the changeover from control by the local control step to control by the integrated control step in a predetermined set period of time.

24. (Previously Presented) A motion controlling method for a robot apparatus according to claim 23, wherein the set time is determined in response to an object apparatus motion at the integrated control step.

25. (Previously Presented) A motion controlling method for a robot apparatus according to claim 23, wherein said robot apparatus is a legged mobile robot including a plurality of movable legs, and the set time is determined depending upon a walking cycle using said movable legs.

26-28. (Canceled)